

Y

(11) EP 1 199 103 A2

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication: 24.04.2002 Bulletin 2002/17

(51) Int Ct.7: B01J 35/00, B01J 35/10

(21) Application number: 01308838.0

(22) Date of filing: 18.10.2001

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: 20.10.2000 JP 2000321026

09.11.2000 JP 2000341713

(71) Applicant: SUMITOMO CHEMICAL COMPANY, LIMITED Chuo-ku, Osaka 305 (JP) (72) Inventors:

 Okusako, Kensen Niihama-shi, Ehime (JP)

Ando, Hiroyuki
 Niihama-shi, Ehime (JP)

(74) Representative: Cresswell, Thomas Anthony J.A. KEMP & CO. 14 South Square Gray's Inn London WC1R 5JJ (GB)

(54) Photocatalyst, process for producing the same and photocatalyst coating composition comprising the same

(57) A photocatalyst is provided, which comprises a titanium oxide and a metal-containing compound other than titanium oxide on the surface of the titanium oxide, wherein the metal-containing compound is a metal oxide having an acid site and the photocatalyst has a BET specific surface area of about 55 m²/g or larger, or wherein the metal-containing compound is a basic met-

al-containing compound and the photocatalyst has an anatase-crystalline structure and an anatase-crystalline size of about 10 nm or larger. The photocatalyst shows sufficiently high photocatalytic activities under irradiation by visible light.

4